

IN THE CLAIMS:

Please amend Claims 1 to 27 as shown below. The claims, as pending in the subject application, now read as follows:

1. (Currently amended) A preview image display method for displaying a print preview image, the preview image display locates in a print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, said preview image display method comprising:

a converting step of converting a print command from an application into intermediate codes in units of logical pages;

a judging step of judging whether the bookbinding print is selected or not;

a setting step of setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted in said converting step when it is judged that bookbinding print is selected in said judging step and printing data is created;

an output step of outputting the intermediate codes converted in said converting step based on the output order set in said setting step; and

a display step of displaying a page image based on the intermediate codes converted in said converting step based on the display order of logical pages, that is an order of turning pages after binding the physical pages, as a preview image on a screen when it is judged that bookbinding print is selected in said judging step and the print preview image is displayed,

wherein the output order of the intermediate codes set in said setting step differs from the display order of logical pages, that is an order of turning physical pages after bookbinding, for print preview.

2. (Currently amended) The method according to claim 1, wherein the displaying ~~outputting~~ step includes a step of displaying ~~rendering~~ while dividing pages in units of bookbinding units.

3. (Currently amended) The method according to claim 1, wherein the displaying ~~outputting~~ step includes a step of laying out pages in a designated open direction.

4. (Currently amended) The method according to claim 3, wherein the displaying ~~outputting~~ step includes a step of displaying ~~rendering~~ while dividing pages into pairs of pages each of which form a spread after bookbinding.

5. (Currently amended) The method according to claim 3, wherein when one of right and left open directions is designated as the open direction, pages are displayed ~~rendered~~ with pages that form spreads being located at neighboring ~~[[.]]~~positions in the designated direction.

6. (Currently amended) The method according to claim 3, wherein when a top open direction is designated as the open direction, pages are displayed ~~rendered~~ with pages that form spreads being located at vertically neighboring positions.

7. (Currently amended) The method according to claim 1, further comprising a page number displaying ~~rendering~~ step of displaying ~~rendering~~ page numbers of the pages in correspondence with the displayed ~~rendered~~ pages.

8. (Currently amended) The method according to claim 1, wherein said print control apparatus further has an insert function of inserting a cover page, and the displaying ~~outputting~~ step includes a step of displaying ~~rendering~~ a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated.

9. (Currently amended) A print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

converting means for converting a print command from an application into intermediate codes in units of logical pages;

judging means for judging whether the bookbinding print is selected or not;

setting means for setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted by said converting means when it is judged that bookbinding print is selected by said judging means and printing data is created;

output means for outputting the intermediate codes converted by said converting means based on the output order set by said setting means; and

display means for displaying a page image based on the intermediate codes converted by said converting means ~~[[step]]~~ based on the display order of logical pages, that is an

order of turning pages after binding the physical pages, as a preview image on a screen when it is judged that bookbinding print is selected by said judging means and the print preview image is displayed,

wherein the output order of the intermediate codes set by said setting means differs from the display order of logical pages, that is an order of turning physical pages after bookbinding, for print preview.

10. (Currently amended) The apparatus according to claim 9, wherein said ~~displaying~~ ~~outputting~~ means displays ~~renders~~ while dividing pages in units of bookbinding units.

11. (Currently amended) The apparatus according to claim 9, wherein said ~~displaying~~ ~~outputting~~ means lays out pages in a designated open direction.

12. (Currently amended) The apparatus according to claim 11, wherein said ~~displaying~~ ~~outputting~~ means displays ~~renders~~ while dividing pages into pairs of pages each of which form a spread after bookbinding.

13. (Currently amended) The apparatus according to claim 11, wherein when one of right and left open directions is designated as the open direction, pages are displayed ~~rendered~~ with pages that form spreads being located at neighboring positions in the designated direction.

14. (Currently amended) The apparatus according to claim 11, wherein when a top open direction is designated as the open direction, pages are displayed ~~rendered~~ with pages that form spreads being located at vertically neighboring positions.

15. (Currently amended) The apparatus according to claim 9, wherein said displaying ~~output~~ means also displays ~~renders~~ page numbers of the pages in correspondence with the displayed ~~outputted~~ pages.

16. (Currently amended) The apparatus according to claim 9, wherein said print control apparatus further has an insert function of inserting a cover page, and said displaying ~~output~~ means displays ~~renders~~ a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated.

17. (Currently amended) A storage medium that stores a computer program for making a print control apparatus generate print data to be sent to a printer and display a print preview image, the print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

a program code of a converting step of converting a print command from an application into intermediate codes in units of logical pages;

a program code of a judging step of judging whether the bookbinding print is selected or not;

a program code of a setting step of setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted in said converted step when it is judged that bookbinding print is selected in said judging step and printing data is created;

a program code of an output step of outputting the intermediate codes converted in said converting step based on the output order set in said setting step; and

a program code of a displaying step of displaying a page image based on the intermediate codes converted in said converting step based on the display order of logical pages, that is an order of turning pages after bookbinding, as a preview image on a screen when it is judged that bookbinding print is selected in said judging step and the print preview image is displayed,

wherein the output order of the intermediate codes set in said setting step differs from the display order of logical pages, that is an order of turning physical pages after binding the physical pages, for print preview.

18. (Currently amended) The medium according to claim 17, wherein the ~~displaying~~ ~~outputting~~ step includes the step of displaying ~~rendering~~ while dividing pages in units of bookbinding units.

19. (Currently amended) The medium according to claim 17, wherein the ~~displaying~~ ~~outputting~~ step includes the step of laying out pages in a designated open direction.

20. (Currently amended) The medium according to claim 19 [[17]], wherein the ~~displaying~~ ~~outputting~~ step includes the step of ~~displaying~~ ~~rendering~~ while dividing pages into pairs of pages each of which form a spread after bookbinding.

21. (Currently amended) The medium according to claim 19, wherein when one of right and left open directions is designated as the open direction, pages are ~~displayed~~ ~~rendered~~ with pages that form spreads being located at neighboring positions in the designated direction.

22. (Currently amended) The medium according to claim 19, wherein when a top open direction is designated as the open direction, pages are ~~displayed~~ ~~rendered~~ with pages that form spreads being located at vertically neighboring positions.

23. (Currently amended) The medium according to claim 17, further comprising the page number ~~displaying~~ ~~rendering~~ step of ~~displaying~~ ~~rendering~~ page numbers of the pages in correspondence with the ~~displayed~~ ~~rendered~~ pages.

24. (Currently amended) The medium according to claim 17, further comprising an insert step of inserting a cover page, and the ~~displaying~~ ~~rendering~~ step includes the step of ~~displaying~~ ~~rendering~~ a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated.

25. (Currently amended) A preview image display method for displaying a print preview image, the preview image display locates in a print control apparatus having a

bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages on which logical pages are rendered, folded once, said preview image display method comprising:

a converting step of converting a print command from an application to intermediate codes in units of logical pages;

a judging step of judging whether the bookbinding print is selected or not; and

a displaying step of displaying inconsecutive ~~said intermediate codes in units of~~ logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected in said judging step.

26. (Currently amended) A print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

converting means for converting a print command from an application to intermediate codes in units of logical pages;

judging means for judging whether the bookbinding print is selected or not; and

displaying means for displaying inconsecutive ~~said intermediate codes in units of~~ logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected by said judging means.



27. (Currently amended) A storage medium that stores a computer program for making a print control apparatus generate print data to be sent to a printer and display a print preview image, the print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

a program code of a converting step of converting a print command from an application to intermediate codes in units of logical pages;

a program of a judging step of judging whether the bookbinding print is selected or not; and

a program code of a displaying step of displaying inconsecutive ~~said intermediate codes in units of~~ logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected in said judging step.